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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,279	11/03/2003	Jun Yan	MVIS 02-24	4514
7590	11/23/2005		EXAMINER TAMAI, KARL I	
Microvision, Inc. PO Box 3008 Bothell, WA 98041			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/700,279

Applicant(s)

YAN ET AL.

Examiner

Tamai I.E. Karl

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/20/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims 14-20 drawn to an invention nonelected with traverse in Paper dated 6/17/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Specification***

2. The amended title, "MEMS SCANNER WITH DUAL DRIVE", is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner suggests "MEMS SCANNER WITH DUAL MAGNETIC AND CAPACITIVE DRIVE".

### ***Drawings***

3. The objection to the drawings under 37 CFR 1.83(a) is withdrawn.

### ***Claim Objections***

4. The objection to Claim 7 is withdrawn.

### ***Claim Rejections - 35 USC § 112***

5. The rejection of Claim 7 under 35 U.S.C. 112, first paragraph, is withdrawn.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neukermans et al. (Neukermans)(US 5969465) and Ueda et al. (Ueda)(US 6262827). Neukermans teaches an optical scanner with a scan plate rotatably by magnetic deflection and with electrostatic deflection of the outer frame (see figure 13) about the same axis of rotation. Neukermans teaches leads 174 for the coil coupled to the torsion arm. Neukermans teaches every aspect of the invention except the second actuator element mechanically couple

Art Unit: 2834

to the scan plate. Ueda teaches a mirror actuator having the electrodes separate from the mirror to provide independent control of the electrodes. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the actuator of Neukermans with the electrodes mechanically coupled to the scan plate to provide independent control of the actuator electrodes and because it has been held that making a formally integral structure in various elements involves only routine skill in the art (*Nerwin v. Erlichman*, 168 USPQ 177, 179).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neukermans et al. (Neukermans)(US 5969465) and Ueda et al. (Ueda)(US 6262827), in further view of Izeki et al. (Izeki)(JP 2000147419). Neukermans and Ueda teach every aspect of the invention except the capacitive actuator having a movable comb. Izeki teaches comb actuators parallel plate actuators to obtain a high speed and at a wide deflecting angle even under low driving power and also making a reflection mirror part have very high rigidity. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the actuator of Neukermans and Ueda with the electrodes being combs to having low power and wide deflection angle.

10. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neukermans et al. (Neukermans)(US 6122394) and Ueda et al. (Ueda)(US 6262827), in further view of Izeki et al. (Izeki)(JP 2000147419). Neukermans

Art Unit: 2834

and Ueda teach every aspect of the invention except the capacitive actuator having a movable comb. Izeki teaches comb actuators parallel plate actuators to obtain a high speed and at a wide deflecting angle even under low driving power and also making a reflection mirror part have very high rigidity. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the actuator of Neukermans and Ueda with the electrodes being combs to having low power and wide deflection angle.

#### ***Allowable Subject Matter***

11. Claims 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground of rejection. Applicant's arguments regarding Claim 8 are not persuasive. The claims do not limit the pivot axis to the same pivot axis, as set forth in claim 1.

#### ***Conclusion***

13. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

Art Unit: 2834

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

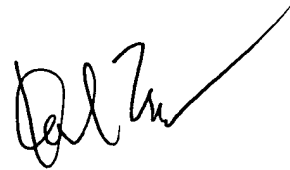
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (571) 273 - 8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl I Tamai  
PRIMARY PATENT EXAMINER  
November 21, 2005

A handwritten signature in black ink, appearing to read 'Karl I Tamai', with a long, sweeping horizontal line extending to the right.

KARL TAMAI  
PRIMARY EXAMINER